

**MECHANICAL RECYCLING OF A WAFER COMPRISING A
BUFFER LAYER AFTER HAVING SEPARATED A THIN
LAYER THEREFROM BY MECHANICAL MEANS**

ABSTRACT

A method of recycling a donor wafer after detaching at least one useful layer is provided, the donor wafer comprising successively a substrate, a buffer structure and, before detachment, a useful layer. The method comprises employing mechanical means to remove part of the donor wafer on the side where the detachment took place, such that, after removal of substance, there remains at least part of the buffer structure capable of being reused as at least part of a buffer structure during a subsequent detachment of a useful layer. The present document also relates to methods of detaching a thin layer from a donor wafer which can be recycled according to the invention, as well as donor wafers which can be recycled in accordance with the invention.